REMARKS/ARGUMENTS

Status of the Application

In the Office Action, claims 1-4 and 7-13 were rejected and claims 5 and 6 were objected to. Applicants note that the Examiner indicated that claims 5 and 6 are allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 14, corresponding to claim 5 rewritten in independent form including all of the limitations of claim 1, and claim 15, corresponding to claim 6 and depending on claim 14, have been added and should be allowable.

In the present Amendment, claims 1, 4-8, and 12 have been amended. Thus, claims 1-15 are pending. Please note that the amendments to claims 1, 4, 5, and 12 are merely grammatical corrections. The amendment to claim 6 is for clarity and is fully supported by the specification (see pg. 3, lines 11-15). The amendment to claim 7 changes only grammar and the incorrect use of the transitional phrase "comprising" for the introduction to a Markush group. The amendment to claim 8 is for clarity and is fully supported by the specification (see pg. 11, lines 28-33). No new matter has been added.

Rejections Under 35 U.S.C § 103(a)

Claims 1-3 and 7-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Numata et al. (U.S. Patent No. 6,539,325) in view of Snyder et al. (U.S. Patent No. 5,907,495), in further view of the BYK-Garner wave-scan DOI product (https://byk-gardnerusa.com/cgi-bin/ncommerce3/ExecMacro/pages/GB-4816.D2W/REPORT?STORE=BYK&CGRY_NUM=18061), in further view of Cooper (U.S. Patent No. 6,118,456), in further view of Sasaki (U.S. Patent No. 5,577,960). These rejections are respectfully traversed.

First, Applicants express confusion as to the actual basis of the BYK-Garner wave-scan DOI product as a prior art reference. While the Examiner states that the product is the reference, the Examiner actually uses disclosure from the website in making the rejection (see paragraphs 8 and 10 of the Office Action). Websites must have a publication or retrieval date before they can be prior art under section 102(a) or (b). MPEP § 2128. If a publication is not prior art under section 102(a) or (b), it

a spectrophotometer capable of color measurement at a plurality of viewing angles, and an electronic balance (col. 3, lines 41-44). This apparatus calculates a paint formula, particularly the color and flop influencing constituents of the paint formula, on the basis of a spectrophotometric color measurement, comparing this measurement with data in a color database comprising assigned paint formulas. Thus, the user can calculate the paint formula that matches the color shade of the surface to be repair coated.

The section of Numata et al. cited by the Examiner merely describes the preparation of coated panels wherein the relative formulation of colorants and metallic or pearlescent pigments, the colorimetric data of the coated panels, and the coating conditions are stored in a database (see col. 9, lines 15-39). There is no disclosure of the generation of a computer image of a coated three-dimensional object because the invention of Numata et al. only leads to the calculation of a paint formula based on the comparison of spectrophotometric data taken by color measurement of a coated surface to be repair painted and colorimetric data stored in a database and assigned paint formulations. Furthermore, no mention of the creation of three-dimensional objects in a coating is given anywhere else in the Numata et al. disclosure.

Based on the object and disclosure of Numata et al., Applicants are uncertain as to how anyone of ordinary skill in the art could find a suggestion to combine Numata et al. with the other references to produce Applicants' claimed process. In essence, the Examiner provided references that, at most, individually explained the steps of Applicants' claimed process. Mere hindsight explanation of an invention, however, is not the proper test for obviousness. The Examiner must provide "evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done." Ex parte Levengood, 28 U.S.P.Q.2d (BNA) 1300, 1302 (B.P.A.I. 1993). Here, the Examiner went step-by-step through Applicants' claimed process and added references that he argued were equivalent to the steps in claim 1. The Examiner does not provide any indication of a motivation for one skilled in the art actually to perform the Applicants' claimed process as required in a proper obviousness rejection.

cannot be prior art under section 103(a). MPEP § 2141.01(I). While the wave-scan DOI website indicates a copyright of 2000, there is no further indication that this website was publicly available prior to the Applicants' filing date. A copyright notice does not signify the website's publication date, but rather indicates that the author of the website is claiming that the website is original and fixed in a tangible medium of expression as of sometime in the year 2000. 17 U.S.C. §§ 102(a), 401 (2000). Furthermore, without an accurate publication date, Applicants are unsure how they could antedate this reference.

Even if the website is available as prior art, the Examiner engaged in impermissible hindsight reconstruction of Applicants' claimed process. "It is impermissible to use the claimed invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention is rendered obvious." In re Fritch, 972 F.2d 1260, 1266 (Fed. Cir. 1992) (internal quotation omitted). Applicants recognize that the large number of references used by the Examiner is not the key inquiry; rather importance lies in whether the references supply some suggestion to combine. See In re Gorman, 933 F.2d 982, 986 (Fed. Cir. 1991) (noting that the meaning of the references to one skilled in the art is important, not the number of references combined). Here, the Examiner used the references individually to piece together each step of Applicants' claimed process. There is simply no disclosure in any of the references directing one of ordinary skill in the art to combine the references cited by the Examiner to create Applicants' claimed process. Indeed, there is not even disclosure that would make it obvious to try to produce Applicants' claimed process, a standard that also is "not a legitimate test of patentability." In re Fine, 837 F.2d 1071, 1075 (Fed. Cir. 1988).

For example, in conclusory fashion, the Examiner states that Numata et al. disclose a process for the generation of a computer image of a coated, three-dimensional object. The objective of Numata et al., however, is to provide a color matching apparatus for automotive repair paints that enables even inexperienced personnel to perform color matching of repair paint, whether or not the repair paint contains a metallic or pearlescent pigment, in a reduced number of steps and with high precision in a short time. Numata et al. achieve this objective through a color matching apparatus for automotive repair that comprises a computer, a color display,

Even if the references somehow can be combined by one of ordinary skill in the art, the Examiner failed to demonstrate that claim 1 was unpatentable over the prior art. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP § 2143.03. For example, the Examiner argues that Numata et al. in combination with Snyder et al. discloses the preamble and first step of Applicants' claimed process. Numata et al., however, do not disclose or suggest the display of a coated three-dimensional object, and there is no motivation for one of ordinary skill in the art to combine this reference with any other reference cited by the Examiner to achieve this objective. Numata et al. actually disclose a color matching apparatus for automotive repair paints that calculates paint formulations on the basis of spectrophotometric measurements (see col. 3, lines 40-63). One of ordinary skill in the art would not equate color matching with the generation of a three-dimensional object.

The rejection is invalid for two further reasons. First, Applicants express confusion as to the significance of customer satisfaction in relation to Applicants' use of a relevant coating layer. During the course of a patent prosecution, the Examiner must use the meaning of claim terms as the Applicant has defined them in the specification as long as the claim term is not given a meaning repugnant to its usual meaning. In re Zletz, 893 F.2d 319, 321 (Fed. Cir. 1989); In re Hill, 161 F.2d 367, 369 (C.C.P.A. 1947); see also MPEP § 2173.05(a). As defined on page 2, lines 6-11, of Applicants' specification, the relevant coating layer can be, for example, "a primer, a primer surfacer, a base coat, a clear coat or a top coat" applied under the differing coating parameters. Customer satisfaction simply has no relevance to this definition. Second, the Examiner ignored the fact that step 1 of Applicants' claimed process requires that the relevant coating layer be applied "under the influence of a set of coating parameters which differs with respect to each panel." Neither Numata et al. nor Snyder et al. provide this missing element.

Additionally, the Examiner asserts that Sasaki teaches step (e) and (f) of Applicants' claimed invention. Sasaki, however, discloses a real-time display type image synthesizing system that can display a three-dimensional object with fewer polygons at a high resolution. The disclosure is directed particularly towards generating these three-dimensional objects in video games. Step (e) of Applicants'

claimed invention requires that the "relevant set of coating parameters" be assigned to each polygonal area. One of ordinary skill in the art would not combine a disclosure that teaches generation of video game images, but does not provide any disclosure of assigning coating parameters to polygons, with Numata et al., Snyder et al., the BYK-Garner wave-scan DOI product, and Cooper to provide the missing elements of step (e). Furthermore, it is doubtful that video games are an analogous art to paint coatings as is required before a reference can be included in the prior art available for an obviousness rejection. MPEP § 2141.01(a).

In light of the above, Applicants respectfully submit that the rejections of dependent claims 2, 3, and 7-13 are no longer valid. MPEP § 2143.03.

Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Numata et al., in view of Snyder et al., in further view of the BYK-Garner wave-scan DOI product website, in further view of Cooper, in further view of Sasaki, in further view of Rupieper et al. (U.S. Patent No. 5,991,042). Because claim 4 is dependent on claim 1, the same arguments made above apply here and will not be repeated.

The object of Rupieper et al. is to provide an efficient method of characterizing a lacquered surface in regard to its visual effect as a function of the coating thickness of one or more lacquer coats (see col. 1, lines 49-51). To accomplish this, a wedge of coating is applied to a substrate and then measurements are made. The coating thickness gradient or wedge may range between greater than 0 and 100 μm (see col. 2, line 65). In contrast, Applicants do not characterize the visual effect of a lacquer-coated surface in regard to the thickness of the coating but rather generate a computer image of a three-dimensional object having a relevant coating layer thereon. Consequently, Applicants respectfully submit that the rejection of claim 4 is no longer valid. MPEP § 2143.03.

Summary

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. In order to expedite disposition of this case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Should there be a fee due which is not

accounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

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